

**ABSTRACT OF THE DISCLOSURE**

A resistance module for an exercise machine for providing a substantially constant force through a range of motion includes at least one cantilever spring and at least one rigid member movable with respect to one another along a path of travel. The rigid member causes the

5 cantilever spring to deflect and produce a resistance force. The cantilever spring has an anchored end and a deflection end. The rigid member engages the deflection end of the cantilever spring, and constrains the deflection end to a predetermined path of deflection as the cantilever spring and the rigid member move with respect to one another. The rigid member can be a non-planer contact surface along which the deflection end tracks, or a pivot link. The module can include

10 means for operatively coupling at least one of the cantilever spring and the at least one rigid member to an exercise machine.